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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,175	02/24/2004	Mark J. Soulliere	AVA-P040	3794

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EXAMINER

LEUNG, WAI LUN

ART UNIT	PAPER NUMBER
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2613

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/29/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/786,175

Applicant(s)

SOULLIERE, MARK J.

Examiner

Danny Wai Lun Leung

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-13 is/are allowed.
- 6) ☒ Claim(s) 14-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/24/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Uemura et al.** (*US006434288B1*), in view of **Kinoshita et al.** (*US007116905B2*).

Regarding claim 14, **Uemura** discloses an automatic protection switching (APS) controller method for OMS shared protection in a ROADM (*18, fig 4*), comprising:

receiving a triggering input signal for protection switching (*col 10, ln 60-67; "detecting the faulty state of the signal"*);

generating a switching command output to a 2xl switch (*places receiving optical switch 9, fig 4 in the cross state*); and

sending a command to deactivate or reactivate one or more optical receivers (*preparatory terminal units 14 and 20, fig 4*) locally configured to receive extra traffic (*col 10, ln 25-32, units 14 and 20 are normally configured to receive extra traffic thru preparatory path*), wherein under a failure condition, one or more extra traffic receivers are deactivated (*col 11, ln 1-15*).

Uemura does not disclose expressly wherein the switching command is generated within an optical supervisory channel, and an OMS signal is looped back within a ROADM to present a drop signal via a broadcast and select module.

Kinoshita, from the same field of endeavor, teaches an automatic protection switching (APS) controller method (*fig 16*) for OMS shared protection in a ROADM (*201, fig 15*), wherein the switching command is generated within an optical supervisory channel (*OSC, col 21, ln 13-15; col 14, ln 62-67*), and an OMS signal is looped back (*col 15, ln 18-27*) within a ROADM (*201, fig 9*) to present a drop signal via a broadcast and select module (*EMS 290, fig 9; col 22, ln 19-30*). Therefore, it would have been obvious for a person of ordinary skill in the art at the time of invention to generate **Uemura's** switching command output to a 2x1 switch within an optical supervisory channel, as suggested by **Kinoshita**, and wherein under a failure condition, one or more **Uemura's** extra traffic receivers are deactivated when an OMS signal is looped back within a ROADM to present a drop signal via a broadcast and select module as suggested by **Kinoshita**. The motivation for doing so would have been to effectively control the switches using optical supervisory channel and loopback OMS signal as suggested by **Kinoshita**, such that a more reliable protection switching can be realized in the event of a fiber cut.

As to claim 15, **Uemura** further teaches wherein in the sending step, comprises the extra traffic being carried on one or more Optical Channels that use spare protection wavelengths under a normal condition (*col 10, ln 25-49*).

As to claim 16, **Uemura** further teaches wherein in the sending step, comprises the extra traffic being pre-empted under the failure condition (*col 10, ln 50-67; working path being detour, and the preparatory signal is discarded*).

As to claim 17, **Kinoshita** further teaches the method further comprising transmitting a message to other nodes via the optical supervisory channel (*col 21, ln 11-25, where NMS 292 communicates between nodes via OSC as shown in fig 15*).

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As to claim 18, **Kinoshita** further teaches wherein the receiving step comprises a locally detected signal fault, a manually initiated command, or a bridge request from another node (*col 21, ln 11-43*).

Allowable Subject Matter

3. Claims 1-13 are allowed over prior art.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Danny Wai Lun Leung whose telephone number is (571) 272-5504. The examiner can normally be reached on 9:30am-9:00pm Mon-Thur.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DWL
January 23, 2007


JASON CHAN
SUPERVISORY PATENT EXAMINER
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